THE PRINCETON UNIVERSITY ARCHÆOLOGICAL EXPEDITION TO SYRIA.

BY HOWARD CROSBY BUTLER. (Read Abril 19, 1907.)

In a paper of this length I can do no more than present a rough outline of the work of the Princeton Expedition to Syria, and dwell upon a few of the more important sections of its work.

The Princeton Expedition of 1904–5 was organized to carry on and supplement the work of the American Expedition to Syria in 1899–1900. Both expeditions comprised four departments, one for surveying and making maps, one for the study of architecture and the other arts, one for Greek and Latin epigraphy and one for Semitic epigraphy. These four departments, with the exception of that for surveying, were in charge of the same four men on both expeditions.

The country explored is more narrowly defined as Central Syria, comprising, in the south, the country far east of the Jordan, the Haurân and the regions south and east of it, namely the ancient Roman Province of Arabia; and, in the north, the country between the river Orontes and the Euphrates, extending as far north as Aleppo; this comprises the ancient Provinces of Syria Prima and Euphratesia. The district between these two regions, comprising Damascus and its vicinity, is better known and less important for archæological research.

These two great tracts, with the exception of the Haurân, are entirely, or for the most part, desert, and are consequently uninhabited except for occasional bands of nomads. They are thus so much the better for the work of archæologists, for the reason that, having been deserted for some thirteen centuries, they have known only natural changes since the beginning of the seventh century. Our explorations were confined almost exclusively to the deserted localities.

1907.] BUTLER—ARCHÆOLOGICAL EXPEDITION TO SYRIA. 183

The barren wastes of central Syria are not to be thought of as flat and sandy plains; the region is mountainous in most parts, though, as one goes further east, the hills are lower and the country becomes more of a rolling nature. The mountain districts, where the most important remains are found, present a formation not unlike our own Berkshires in Massachusetts, or the mountains of Pennsylvania, but where our own hills are covered with verdure and capped with forests, the hill country of Central Syria is stripped of soil, devoid of verdure, barren of forests and practically waterless. The north is a rocky, mountain waste of limestone, naked to the sky; the south is a rolling sea of black basalt.

This whole region, now sparsely settled or wholly deserted, was, in ancient times, the seat of a highly developed civilization, and thickly populated. There are extensive remains here of cities, large and small, of military posts and excellent roads, all in a remarkable state of preservation, witnessing to the former wealth and imporcompletely exposed for the examination of the explorer, and their tance of this desert land. These remains are not buried; they stand state of ruin has been brought about solely by earthquakes.

A hundred questions arise as to how a fertile country could be reduced to the condition of a desert in fifteen hundred years, and a long paper, even a book, might be prepared, attempting to give an explanation. All that I can say now is that there is abundant evidence to prove, first, that the region was thickly settled-twenty large sites, all deserted, can be counted from the top of one high hill; second, that there was soil where now there is none, for the hillsides were terraced up with high walls behind which there is now hardly a cupful of earth; third, that there was water in the stream beds that are now always dry-aqueducts, washing places, bridges and stepping stones show this; fourth, that grapes and olives were extensively grown, for thousands of wine and oil presses are to be found near the deserted towns; and fifth, that wood was abundant, for timbers of large size were too extensively employed in the architecture to permit of their having been imported. Whatever other agencies may have operated to reduce this country to its present state, I believe that the cutting of forests aided and hastened the end.

These parts of Svria have been but little explored; few of the sites visited by our expedition appear upon any map. The pioneer explorer was the Marquis de Vogüé, who published maps of two small sections of the country, together with one hundred and fifty drawings of architecture, as the result of his journey in 1860-61. Since that time no systematic explorations have been carried on here, though occasional travellers have crossed the region at one point or another. And, though the great high-road between Damascus and Aleppo passes through the northern district, there are important sites within a few miles of it, on either side, that have never been recorded, and probably never visited, by Europeans since the Roman legions were withdrawn. The maps made by our surveyors will add the names of forty ancient towns and a far larger number of smaller sites to the map of Syria, will show the courses of ancient streams and roads, and will thus contribute to Svrian cartography.

A great body of monuments of architecture is being published from the measured drawings, notes and photographs made by our expedition. The earliest building with a definite date belongs to the second century, B. C., though there are undoubtedly some of the structures that are of greater antiquity. From the first century, B. C., to the beginning of the seventh, A. D., there is a great number of definitely dated monuments-buildings of all kinds, temples, palaces, public baths, theatres, fortresses, churches, private residences and tombs of greater or less architectural importance. The great periods represented are the Nabatæan of the first century B.C.-A. D., the Roman of the second and third centuries, A. D., and the Christian of the fourth to the seventh century. The most important of these are the Nabatæan and the Christian, the former as representing the earliest pre-Christian Arabic civilization. The monuments of this period show great dignity of design, grandeur of scale, richness of decoration and fineness of execution, both in the art of building and of carving. This architectural style has been, hitherto, practically unknown. The buildings of the Christian period also present a style of architecture that stands by itself. They illustrate, in well preserved examples, every variety of structure required by a highly civilized people. We have found here the

1907.] BUTLER—ARCHÆOLOGICAL EXPEDITION TO SYRIA. 185

earliest churches with definitely dated inscriptions upon them—perfectly developed basilicas of the fourth century—public baths as luxurious as those of pagan times, the best preserved private houses of antiquity, not excepting those of Pompeii, and mausoleums of great magnificence.

The architecture of the Nabatæan period, in its earliest monuments, shows no influence of Greek art; its ornament is purely oriental, its profiles unique, and its decorative patterns, either geometrical or taken from the animal or vegetable worlds, are full of oriental feeling. The great temple precinct of Ba'al Shamîn, at a place called Si', is a wonderful aggregation of structures including, besides the main temple, a colonnaded court (called a *theatron* in an inscription), two other enclosed and paved courts with monumental gateways, two minor temples, and a paved, sacred way.

The Roman period is of great interest for the reason that Syrian builders under Roman domination were far freer in their employment of classical details of construction and of ornament than were the architects of Rome. The pendentive, for instance, the detail of construction by means of which a dome is accommodated to a square substructure, was used in Central Syria in the second and third centuries; it did not appear in Europe until Byzantine times in the sixth century. Classical ornament in the hands of these Syrian architects was infused with a luxuriant grace unknown at Rome. Some of the most stupendous and some of the richest buildings of the Roman Empire were erected in Syria.

The Christian architecture shows absolute independence of Rome on the one side and of Constantinople on the other. It is a curious blending of ancient Greek with oriental motives. The constructive principles are largely Greek, the mouldings are Greek, but the carved ornament is distinctly Asiatic. The Christian period of architecture in Syria did not inaugurate a decline, as it did in Europe, but begins a new fresh and vigorous style that was cut off in its prime by the rise of Mohammedanism.

In addition to our records of these monuments, we here collected many coins, dating from the third century, B. C., to the seventh, A. D., making a series almost complete that covers a period of a thousand years. Many of these coins were minted at Antioch, Damascus, Bosra or one of the smaller Syrian cities. Smaller collections of glass and terra cotta, and a few specimens of ornaments in gold, silver and bronze, together with beads and seals, serve to indicate the high skill of various craftsmen in Syria 1,500 years ago.

Over a thousand inscriptions in Greek and Latin were copied by the Princeton Expedition. They are chiefly useful in giving dates to the architecture, though a few of them are important historically or linguistically. The number of Semitic inscriptions is smaller, but more important, perhaps, to the science of epigraphy because they are rarer. These embrace inscriptions in Nabatæan, Palmyrene, Syriac, Safaïtic (so-called), Cufic and Arabic.

Combining the study of topography, of architecture with its auxiliary arts, like sculpture, wall painting and mosaic work, and of inscriptions, we should be able to reconstruct the ancient civilization of central Syria at different periods with considerable accuracy.

The reconstruction of an early Christian civilization that was rich and prosperous, even luxurious, is especially interesting; for nowhere else in the world, so far as it is known, are there such abundant remains of the monuments, the utensils, the ornaments, the things in daily use that go to make up the unwritten documents of that period, and the inscriptions provide many of the written sort.

The maps, the monuments of architecture, and the inscriptions are to be published together, beginning at once, in a series of fascicules. Each fascicule is to be devoted to an important site or a group of less important sites, and will contain the results of the work of each member of the expedition.